UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,105	12/28/2000	Dan Eylon	6599P003X4	8847

8791	7590	02/23/2006

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EXAMINER
PATEL, HARESH N

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>14 December 2005</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-52 and 56-68</u> is/are pending in the application.

    4a) Of the above claim(s) <u>56-68</u> is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-52</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>28 December 2000</u> is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12/14/05, 11/14/05</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-52 and 56-66 are subject to examination. Claims 53-55 are cancelled.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-52 have been considered but are moot in view of the new ground(s) of rejection.

Election/Restrictions

3.   Newly submitted claims 56-68 are directed to an invention (Group II) that is independent or distinct from the invention (Group I, claims 1-55) originally claimed for the following reasons:

Group II) Claims 56-68 are drawn to, generating a predictive model, generating an application package that includes repository, generating an index to the repository, including the index in the application package, determining environmental changes introduced to a computer system, providing an environmental changes for distribution, determining a startup set, providing a startup streamlet set, monitoring file block load requests and identifying file blocks which were loaded prior to reaching the startup point which the software application waits for user input, which the Group I, claims 1-55 is lacking, and, classified in Class 707, subclass 102.

These inventions are distinct for the reasons given above, and the search required for each Group is different and not co-extensive for examination purpose. For example, the searches for the two inventions would not be co-extensive because these groups would require different

searches on PTO's classification class and subclass. The Group II search (claims 57-68) would

require use of search, Class 707, subclass 102 (not required for the invention I).

Since applicant has received an action on the merits for the originally presented

invention, this invention has been constructively elected by original presentation for prosecution

on the merits. Accordingly, claims 57-68 are withdrawn from consideration as being directed to

a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine
grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or
improper timewise extension of the "right to exclude" granted by a patent and to prevent possible
harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.
Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686
F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA
1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to
overcome an actual or provisional rejection based on a nonstatutory double patenting ground
provided the conflicting application or patent is shown to be commonly owned with this
application. See 37 CFR 1.130(b).
Effective January 1, 1994, a registered attorney or agent of record may sign a terminal
disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37
CFR 3.73(b).

4.   Claims 1-52 are rejected under the judicially created doctrine of obviousness-type double

patenting as being unpatentable over claims 1-24 of Raz et al., U.S. Patent No. 6,311,221.

Although the conflicting claims are not identical, they are not patentably distinct from each other

because the patent teaches all the limitations as disclosed such that the interpretation of

transmitting a software application comprising a collection of executably interrelated modules

from a first computer system storing the application to a second computer providing an execution

environment for executing the application using transparently streaming the predictively ordered

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F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA
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only one figure is being amended. The replacement sheet(s) should be labeled --Replacement

Sheet-- in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the

drawing figures. If the examiner does not accept the changes, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the

drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6.   Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the written description requirement. The claim(s) contains subject matter, which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant

art to use and/or make the invention.

7.   The specification of this application does not provide software that implements a system

of the claims 1-18, without using hardware supporting it.

Examiner has reviewed the specification (and also OCR whole document) and could not

find support for the limitations as claimed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

8.   Claims 1, 19 and 38 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claims 1, 19 and 38 recite the limitations, "based on an order in which code is predicted

to be used". There is insufficient antecedent basis for this limitation in the claim (Please see

MPEP 706.03(d). Since, multiple "executable code" exist in the claim (line 4 and line 6 of claim

1), it is not clear which "executable code" is referred by the limitations in the claim. Further, an

order of a single code in reference to itself cannot be predicted.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
requirements of this title.

9.   Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed

to non-statutory subject matter. Claims 1-18 are software per see that is not tangibly embodied

on a computer readable medium and therefore lacks a practical application because it alone

cannot produce its intended outcome. Also, the claims do not perform acts to produce a tangible

result.

10.   Referring to claims 1-18 merely claimed as a computer program i.e., streaming a software

application without using hardware supporting it *per se*, that is, descriptions or expressions of

such a program and that is, descriptive material *per se*, non-functional descriptive material, and

is not statutory because it is not a physical "thing" nor a statutory process, as there are not "acts"

being performed. Such claimed computer programs do not define any structural and functional

interrelationships between the computer program and other claimed aspects of the invention,

which permit the computer program's functionality to be realized. Since a computer program is

merely a set of instructions capable of being executed by a computer, the program itself is not a

process, without the computer-readable medium needed to realize the computer program's

functionality. In contrast, a claimed computer-readable medium encoded with a computer

program defines structural and functional interrelationships between the computer program and

the medium which permit the computer program's functionality to be realized, and is thus

statutory. **Warmerdam**, 33 F.3d at 1361, 31 USPQ2d at 1760. **In re Sarkar**, 588 F.2d 1330,

1333, 200 USPQ 132, 137 (CCPA 1978). See MPEP § 2106(IV)(B)(1)(a).

Claim Rejections - 35 USC § 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

12.   Claims 1-9, 11, 12, 19-28, 30, 31, 38-43, 45 and 46 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Duso et al. 5,892,915 (Hereinafter Duso-EMC-Corporation) in view

of "Official Notice", deVries et al., 6,219,671, Alta Vista Company (Hereinafter deVries-

AltaVista), Krishna et al., 6,012,071, FutureTense (Hereinafter Krishna-FutureTense) and

Arrouye et. al., 6,256,635, Apple Computer Inc., (Hereinafter Arrouye-Apple-Computer).

13.   As per claims 1, 19, 22, 38, 39, Duso-EMC-Corporation clearly teaches a system / a

method / a computer program product, for streaming a software information to a client (e.g., col.,

33, lines 23 – 45, use of stream server and client over the network, figure 2) comprising:

an application library having application files (e.g., use of tape SILO and tape library,

figure 2, col., 7, lines 16 - 40) a streaming manager configured to send the information of

application files to a client as a plurality of streamlets (e.g., software module to send application

files to clients by blocks of data / video clips, col., 8, lines 18 - 50), each streamlet corresponding

to a particular data block in a respective information of application file (e.g., play position of the

clip, figures 25-27, col., 33, col., 33, lines 8 -44),

a prediction model (e.g., concept of sending prefetch data, col., 18, lines 17 – 67) and a

streaming prediction engine (e.g., use of a software module to prefetch data for streaming, figure

28) configured to identify streamlet which is predicted to be most appropriate to send to a given

client at a given time in accordance with the prediction model (e.g., selecting block of data for

prefetching to send to the client based upon need, col., 18, lines 17 – 67), dividing the

information of application files into streamlets prior to initiation of a streaming session, (e.g.,

selecting block of data of the application files before sending to the client, col., 18, lines 17 –

67).

Duso-EMC-Corporation do not specifically mention about providing the model stored

within the library.

"Official Notice" is taken that both the concept and advantages of providing the model

stored within the library is well known and expected in the art. For example, Campbell et al.,

6,058,387 discloses a library that can be used to store model (e.g., paragraphs 5, 13, figure 1);

Renaud et al., 5,958,051, discloses these limitation (e.g., usage of data structure for any files including Java and/or class files and/or applets and/or software components, paragraphs 12, 31); Matyas, Jr., 6,102,287, IBM, discloses these limitations (e.g., usage of structure containing plug-in content and/or HTML pages and/or MIME files, paragraphs 105-107); Desmond et al., 6,493,434, AT&T Corp., discloses these limitations (e.g., usage of structure containing plug-in and/or audio software and/or WAV file, paragraph 22); Perlman, 5,956,485, discloses these limitations (e.g., library containing video games software and/or code, paragraphs 18 and 25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the model stored within the library with the teachings of Duso-EMC-Corporation in order to facilitate the application library to retain the prediction model because the prediction model is implemented using a software module. The software module needs to be stored in a place to be retained for future use. It is well known in the art of using an application library to store the software modules including model software.

Duso-EMC-Corporation does not specifically mention about the software application having multiple files.

deVries-AltaVista discloses about the software application having multiple files (e.g., combined audio/video data using different files JPEG, MPEG etc., for transcoded software application using prediction mechanism, paragraph 32), based on an order in which code within the plurality of streamlets (e.g., figures 5, 8-10) is predicted (e.g., prediction of stream information, paragraph 32) to be used when the software information is executed on the client (e.g., information used for execution at client, paragraphs 32).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Duso-EMC-Corporation with the teachings of deVries-

AltaVista in order to facilitate the software application having multiple files because the multiple

files would help enhance the software application having different modularized pieces.

Duso-EMC-Corporation and AltaVista do not specifically mention about the application

files and streams including executable code.

Krishna-FutureTense discloses the well-known concept of application files and streams

including executable code (e.g., usage of applets and/or plug-in and/or HTML file, paragraphs 6

and 9).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Duso-EMC-Corporation and deVries-AltaVista with the

teachings of Krishna-FutureTense in order to facilitate application files and streams including

executable code because the executable code would help the receiving entity to utilize it. The

well-known concept of streaming would stream executable code from one device to another

device using the prediction mechanism.

Duso-EMC-Corporation, deVries-AltaVista and Krishna-FutureTense do not specifically

mention about streaming a software application based on prediction.

Arrouye-Apple-Computer discloses the well-known concept of streaming a software

application based on client need at a particular time (e.g., installing software application from

remote location, abstract, figures 6, 9, col., 16, lines 41 –67).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Duso-EMC-Corporation, deVries-AltaVista and Krishna-

FutureTense with the teachings of Arrouye-Apple-Computer in order to facilitate streaming a

software application based on client need at a particular time because the streaming of software

application would help the client to utilize it after receiving it's information. Streaming at a

particular time would help client to use the streamed information when needed.

14.   As per claims 2, 3, 20, 21, Duso-EMC-Corporation, deVries-AltaVista, Krishna-

FutureTense and Arrouye-Apple-Computer teaches the claimed limitations rejected under

claims 1 and 19. Duso-EMC-Corporation also teaches that the streamlet size can be specified

(e.g., figure 25, col., 32, lines 31 – 60) and different techniques can be implemented considering

the stream's playback rate in relation to the storage size (e.g., col., 15, lines 43 – 63). However,

Duso-EMC-Corporation do not specifically mention about each streamlet corresponds to a file

data block having a size equal to a code page size used during file reads by an operating system

expected to be present on a client system and the data block size being four kilobytes.

        "Official Notice" is taken that both the concept and advantages of providing each

streamlet corresponds to a file data block having a size equal to a code page size used during file

reads by an operating system expected to be present on a client system and the data block size

being four kilobytes is well known and expected in the art.

        It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include each streamlet corresponds to a file data block having a size equal to a code

page size used during file reads by an operating system expected to be present on a client system

and the data block size being four kilobytes with the teachings of Duso-EMC-Corporation in

order to facilitate an operating system at the client system to receive file streams having data

block size equal to a code page size of four kilobytes because the operating system at the client

system would process the received data considering the page size for processing the received

data. The file streams having four kilobytes size would be easier to handle by the operating

system for processing. For example, Miller et al., 5,237,460, discloses the advantages of having

the size of the data blocks selected to be efficient value depending upon the way the data is

handled in the system, including the block size being selected to be a submultiple of the page

size, which is typically 2K-bytes or 4K-bytes in the most commonly-used operating systems,

col., 2, lines 26 – 59. The operating system at the client would avoid changing the size of the

received file streams and would process the received file streams faster.

15.   As per claims 4, 23, 40, 47, Duso-EMC-Corporation, deVries-AltaVista, Krishna-

FutureTense and Arrouye-Apple-Computer teach the claimed limitations as rejected above.

Duso-EMC-Corporation also teaches the following:

the application files are stored in the application library as preprocessed streamlets (e.g.,

col., 21, lines 31 - 64), each streamlet corresponding to a data block in a particular application

file at a particular offset and having a predefined length (e.g., figures 25 – 27, col., 27, lines 25 –

47),

upon receipt at the server of a request for a particular streamlet from the client, retrieve

the requested streamlet from the application library and transmit the streamlet to the client (col.,

18, lines 17 – 67).

16.   As per claims 5, 6, 24, 25, Duso-EMC-Corporation, deVries-AltaVista, Krishna-

FutureTense and Arrouye-Apple-Computer teach the claimed limitations rejected under claims

1, 4 and 19, 23. Duso-EMC-Corporation also teaches data being compressed (e.g., col., 11, lines

2-48). However, Duso-EMC-Corporation do not specifically mention about a code page size

used during files reads by an operating system expected to be present to a client system.

        "Official Notice" is taken that both the concept and advantages of providing a code page

size used during files reads by an operating system expected to be present to a client system is

well known and expected in the art.

        It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include a code page size used during files reads by an operating system expected to

be present to a client system with the teachings of Duso-EMC-Corporation in order to facilitate

an operating system at the client system to receive file streams having data block size equal to a

code page size for processing because the operating system at the client system would process

the received data considering the page size for processing the received data. The file streams

having predetermined size would be easier to handle by the operating system for processing. For

example, Miller et al., 5,237,460, discloses the advantages of having the size of the data blocks

selected to be efficient value depending upon the way the data is handled in the system,

including the block size being selected to be a submultiple of the page size, which is typically

2K-bytes or 4K-bytes in the most commonly-used operating systems, col., 2, lines 26 – 59. The

operating system at the client would process the received file streams faster with the known

predefined data block size.

17.   As per claims 7, 26, 41, Duso-EMC-Corporation, deVries-AltaVista, Krishna-

FutureTense and Arrouye-Apple-Computer teach the claimed limitations as rejected above.

Duso-EMC-Corporation also teaches the following:

        the streaming manager is configured to send the client upon a first initiation of the

streaming application, a file structure specification of the application files (e.g., figures 25 – 27,

col., 27, lines 25 – 47).

18.   As per claims 8, 9, 27, 28, 42, 43, Duso-EMC-Corporation, deVries-AltaVista, Krishna-

FutureTense and Arrouye-Apple-Computer teach the claimed limitations rejected under claims

1, 7, 19, 26, 38, 41. Duso-EMC-Corporation also teaches the application library has a startup

block comprising the file structure specification and set of streamlets stored therein (e.g., figures

25 – 27, col., 27, lines 25 – 47). However, Duso-EMC-Corporation do not specifically mention

about a set of streamlets comprising at least those streamlets containing the portions of the

application required to enable execution of the application to be initiated.

        "Official Notice" is taken that both the concept and advantages of providing a set of

streamlets comprising at least those streamlets containing the portions of the application required

to enable execution of the application to be initiated is well known and expected in the art.

        It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include a set of streamlets comprising at least those streamlets containing the

portions of the application required to enable execution of the application to be initiated with the

teachings of Duso-EMC-Corporation in order to facilitate the client system to receive data

streams of the application and to start the execution of the application because the client system

would process the received data considering that the received data would be used for starting the

execution of the application. As per the information received by the client system by the stream

blocks, the client would start the execution using the stream blocks of the application. The

stream blocks being for the execution of the application would help the client system to execute

the application after the stream blocks are received.

19.   As per claims 11-12, 30-31, 45-46, Duso-EMC-Corporation, deVries-AltaVista, Krishna-

FutureTense and Arrouye-Apple-Computer teach the claimed limitations rejected under claims

1, 19, 38. Duso-EMC-Corporation also teaches a differential prediction model associated with

the client and the prediction engine configured to make streamlet predictions for the client in

accordance with the default prediction model and the respective differential prediction model

(e.g., col., 21, lines 4 - 30).

However, Duso-EMC-Corporation do not specifically mention about upon receipt of

application usage tracking information from the client and to update at least one of the

differential prediction model for the client and the prediction model.

"Official Notice" is taken that both the concept and advantages of upon receipt of

application usage tracking information from the client and to update at least one of the

differential prediction model for the client and the prediction model is well known and expected

in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include upon receipt of application usage tracking information from the client and

to update at least one of the differential prediction model for the client and the prediction model

with the teachings of Duso-EMC-Corporation in order to facilitate the client system to receive

provide environment support software data streams before the application data streams are used

for initiation and to modify the prefetch/predict information as per the application data streams

usage because the client system would first need data streams of the installing streaming

environment support software. Then, the client system would need the application data streams

for execution. Using the installing streaming environment support software, the client system

would execute the data streams received for the application to be executed. The client system

would provide the application usage status feedback to the block streams sending software to

inform the prediction model for prefetch/predict next information needed by the client.

20.   Claims 10, 29, 44, are rejected under 35 U.S.C. 103(a) as being unpatentable over Duso-

EMC-Corporation, deVries-AltaVista, Krishna-FutureTense and "Official Notice" in view of

Chen et. al. 6,412,004 (Hereinafter Chen).

21.   As per claims 10, 29 and 44, Duso-EMC-Corporation, deVries-AltaVista, Krishna-

FutureTense and Arrouye-Apple-Computer teach the claimed limitations rejected under claims

1, 19, 38. However, Duso-EMC-Corporation, deVries-AltaVista, Krishna-FutureTense and

Arrouye-Apple-Computer do not teach installation of streaming environment support software.

        Chen teaches the following:

        the streaming manager is further configured to install streaming environment support

software on the client prior to initiating an application streaming processes (e.g., The metaserver

can manage both live and on-demand video streams. If a client computer wishes to watch a live

event or an on-demand content, it should be prepared to wait until the event actually starts or

until the tape with the requested multimedia content is installed into the multimedia server, col.

5, line 4 – col. 6, line 10).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Duso-EMC-Corporation, deVries-AltaVista, Krishna-

FutureTense and Arrouye-Apple-Computer with the teachings of Chen in order to facilitate

streaming environment for the streaming application at the client device before the application is

executed because the client system would be able to utilize the server sent streaming

environment instantly whenever it is necessary, including executing the application block

streams.

22.   Claims 13-18, 32-37, 47-52, are rejected under 35 U.S.C. 103(a) as being unpatentable

over Duso-EMC-Corporation, deVries-AltaVista, Krishna-FutureTense and "Official Notice" in

further view of Stumm 5,768,528.

23.   As per claims 13-18, 32-37, 47-52, Duso-EMC-Corporation, deVries-AltaVista, Krishna-

FutureTense and Arrouye-Apple-Computer teach the claimed limitations rejected under claims 1,

19, 38. However, Duso-EMC-Corporation, deVries-AltaVista, Krishna-FutureTense and

Arrouye-Apple-Computer do not teach usage of data map.

Stumm teaches the following.

an application status repository comprising a data map for each active client and the data

map generally indicating the streamlets which are present at the respective client (e.g., The

database server maintains a schedule of events file adapted to contain information relating to

predetermined downloading schedules to the subscribers of the database server. The schedule of

events file or the relevant portions of it are then transmitted to individual subscribers so that

requests for information can be launched from the subscribers terminals at a predetermined time

in accordance with the schedule of event file, abstract, receiving from each subscriber an

information request in accordance with the schedule of events file and a list of existing files in

the subscriber's database including the file names, file sizes and corresponding file identification

code, col. 1 line 12 – col. 2, line 45),

determine if the data map indicates that the client already has the requested streamlet and

request an updated data map from the client and replace the data map with a returned updated

map (e.g., figure 11, col. 1 line 12 – col. 2, line 45);

retrieve the requested streamlet from the application library and update the data map

upon a successful transmission of the requested streamlet to the client (e.g., figure 11, col., 2,

lines 41 – 66),

replace the data map in the application status repository for the client with the data map

received from the client and compare the data map in the application status repository for the

client with the data map received from the client and log mismatches (e.g., figure 11, col. 8 lines

5 – 48).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Duso-EMC-Corporation, deVries-AltaVista, Krishna-

FutureTense and Arrouye-Apple-Computer with the teachings of Stumm to keep track of

previously server sent data at the client. The use of data map would help client application of

what the data has already present at the client, which no longer is necessary to be requested from

the server. By using the same data at the client, which was downloaded previously, it would

save time and network bandwidth during downloading of data at the client.

Conclusion

24.   The prior art made of record (forms PTO-892 and applicant provided IDS cited arts) and

not relied upon is considered pertinent to applicant's disclosure, for example, Guck, 5,911,776,

Unisys Corporation, also teaches the concept of streaming of application using block of streams

for predictive information.

Examiner has cited particular columns and line numbers and/or paragraphs and/or

sections and/or page numbers in the reference(s) as applied to the claims above for the

convenience of the applicant. Although the specified citations are representative of the teachings

of the art and are applied to the specific limitations within the individual claim, other passages

and figures may apply as well. It is respectfully requested from the applicant in preparing

responses, to fully consider the references in entirety, as potentially teaching, all or part of the

claimed invention, as well as the context of the passage, as taught by the prior art or disclosed by
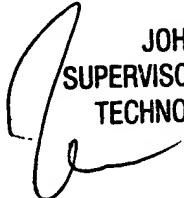
the Examiner.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The

examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to

8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the

organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Haresh Patel

February 15, 2006

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100